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The Theater Commander's Preemptive Strike Option against WMD

by

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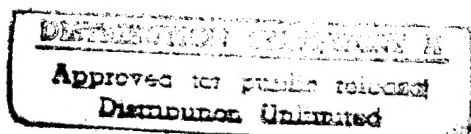
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Abstract of

The Theater Commander's Preemptive Strike Option against WMD

Today theater commanders face emerging regional powers and transnational groups seeking to acquire Weapons of Mass Destruction. Unfortunately, the current international safeguards, such as the Non Proliferation Treaty (NPT) and the International Atomic Energy Agency (IAEA) are ineffective. Additionally, key systems for protection and prevention of WMD are not yet available to the theater commander. This paper's thesis proposes a DoD Counterproliferation Initiative that utilizes a preemptive strike option to counter WMD threats.

Within this strategy, the theater commander can create the conditions where the cost to enter the WMD arena would be too high. It is an active operational strategy that seeks to contain current proliferents, discourage new actors from becoming proliferents, and if necessary, punish those that are too unpredictable or irrational. This theater strategy also moves the use of nuclear weapons as a preemptive option, especially when targeted against chemical and biological threats. This strategy requires extensive theater planning and preparations, including theater exercises and war games to confirm the ends, ways, means and risks associated with the decision to launch preemptive strikes on specific target sets throughout the theater of operations. It is an open, clearly defined strategy to exploit our military advantage short of war against known threats before they can strike our allies or us.

The Theater Commander's Preemptive Strike Option against WMD

Introduction.

Today with all the responsibilities, challenges and obligations that theater commanders face, the most critical threat is not general or theater war, refugee or humanitarian concerns. It is the unabated quest by emerging regional powers, and transnational elements; international organized crime, rogue nations, religious extremists and terrorists searching to up the ante and acquire weapons of mass destruction (WMD).¹ Realizing this, the President took action on "May 24, 1995, revised the Unified Command Plan and assigned to the combatant commanders responsibility for carrying out the mission of countering the proliferation of NBC weapons."² However, our current strategy to curb the market for these weapon systems has not kept pace with the proliferent threats that theater commanders now face.

The Department of Defense (DoD) has not been entirely inactive. It's Counterproliferation Initiative "involves a range of department-wide activities that help to prevent, protect against, and even reverse the danger from spreading nuclear, biological and chemical weapons."³ However, few of these systems are today, available or operational. The research, development and acquisition of systems designed to counter these emerging threats are competing against other critical programs. The defensive measures currently available to counter WMD threats are negligible. Today no biological detection systems exist to issue deploying forces. Equipment decontamination solvents are highly corrosive and incompatible with modern aircraft surfaces and electronic

¹ Although biological weapons have recently taken on their own persona with unique characteristics, they are included here in the term WMD.

² U.S. Department of Defense, Proliferation: Threat and Response (Washington: April 1996), 48.

systems. Systems designed to protect forces from NBC armed ballistic and cruise missiles don't provide theater wide coverage. Finally, individual protective measures for our forces and the civil populations within the theater of operations are not only not forward deployed, they don't even exist.⁴ Yet, according to the National Security Strategy, WMD represents a "major threat to our security and that of our allies and other friendly nations."⁵

The risk we face is now and in the near term. The preemptive use of force, including the use of nuclear weapons, to destroy the capabilities of a WMD proliferent is an option the theater commander should plan and exercise, in order to satisfy his theater specific operational goals and to support the National Security Strategy. This paper considers a theater level preemptive response to address the expanding number of WMD proliferents.

Background

The United States' position on the use and defense of WMD is grounded in our Cold War experiences. Since the demise of the Soviet Union, and our good fortune in the Gulf War, the military doctrine, training and outlook towards the use and protection from WMD threats have lagged behind the realities of the new world environment. The bi-polar concept of mutually assured destruction (MAD) is not a credible deterrent against multiple threats and growing regional powers.

There is a glut of material, industrial technology, and delivery systems available on the world market to the highest bidder. Even the Japanese fringe group Aum

³ *Ibid.*, iv.

⁴ Institute for National Strategic Studies, The Impact of Nuclear, Biological, and Chemical Proliferation on U.S. Armed Forces, (National Defense University, September 1996), 14 and 15.

Shinrikkyo was able to produce an effective, albeit weaker, version of sarin in their 1995 attack of the Tokyo subway. It was also discovered that the cult was, “without the knowledge of any Western Intelligence agency, pursuing a sizable biological warfare capability.”⁶ There are four confirmed nation states, besides the United States, that now possess nuclear weapons. Add Iran, Iraq, Libya and North Korea, (all countries who are avowed adversaries of the United States), with the 15 or more countries that probably possess biological and/or chemical weapons and it is easy to see why the United States’ interests as well as the security of the world community is at risk.⁷

Historical Perspective

Modern WMD has been part of the international scene for the greater part of this century.⁸ Fortunately, since the end of the Second World War, sufficient international restraints existed to keep these weapons locked up as weapons of deterrence between the major powers. Through all major and minor crises, the United States has been secure from these threats. Today a greater threat exists because the technology and the freedom to acquire information make these weapons much more readily available than in the past.

Secondly, the breakup of the Soviet Union caught the western world unprepared for its consequences. Instead of determining and preparing forces to fight a general war against the USSR, theater commanders now face a vastly disjointed international political system. Traditional regional rivalries long suppressed by strict communist control and the

⁵ The White House, A National Security Strategy of Engagement and Enlargement (Washington: February 1996), 19.

⁶ Honorable Richard Danzig, Institute for National Strategic Studies, Biological Warfare: A nation at Risk—A Time to Act, Strategic Forum 58, January 1996, 2.

⁷ Congressional Research Service, CRS Report for Congress—Nuclear, Biological, and Chemical Weapon Proliferation: Potential Military Countermeasures (Washington: June 28, 1994), 1.

natural friction between the East and West kept a great many problems contained. Now regional struggles are commonplace with much broader implications in economic and political matters, and some of these states show no reluctance to use these weapons. Finally, states considered insignificant during the Cold War can today, be a threat to world stability by acquiring WMD, supporting other countries' efforts to acquire WMD, or by supporting transnational groups, terrorist or religious extremist organizations. National or cultural pride must also be considered. States that have acquired WMD cannot be marginalized and gain a voice on the world stage. Simply put, WMD are equalizers. They may counter regional or world conventional threats, and are cheaper, (much cheaper), than maintaining large standing forces. For terrorist and extremist groups, WMD provide the shock value and horror that they demand to highlight their goals.

Failed Safeguards

For many states, WMD systems have been a no risk acquisition. International sanctions, short of verbal condemnation, against states that have recently used chemical weapons (Egypt, Libya and Iraq) have not been seriously or consistently applied. Libya for example, satisfies many conditions that classifies it as a rouge state. There is clear and undisputed evidence that Libya harbors, finances, supports and sometimes directs international terrorists. Furthermore, Libya has an active chemical, nuclear and budding biological program. More importantly, it has demonstrated the capacity and willingness

⁸ The author acknowledges that armies have been practicing biological warfare throughout the ages, whether heaving diseased corpses over castle walls, dumping them into wells or impregnating blankets with contagious diseases.

to use chemical agents against Chadian troops in 1987.⁹ Yet, there is not even a united Western consensus on sanctions to attempt to modify Libya's behavior.

A more recent concern, has been the lucrative black market in weapons trade that has grown out of the continuing economic and political chaos in the former Soviet Union (FSU). Especially troubling is the linkage between the Russian military establishment and international criminal organizations. Russian stockpiles of nuclear and chemical weapons as well as the technology and intellectual potential are a significant concern given the "documented WMD leakages from Russia and the FSU."¹⁰ Given the success of conventional arms smuggling, and the inability of national and international police agencies to stem the rise in the illegal drug trade, a theater commander must prudently plan for the day when WMD will be available to our adversaries.

Besides not having adequate systems to counter the growing threat posed by WMD, today's military is still stuck in the Cold War requirements of the past. The general education system, training and force structure has not kept up with the current realities and threats now faced. In some instances, the senior military leadership is mired in the Cold War paradigm concerning their outlook and views toward WMD challenges. "NBC considerations, especially in the biological area, remain substantially outside the professional expertise of most military officers."¹¹

The Nuclear Non-Proliferation Treaty (NPT) and the International Atomic Energy Agency (IAEA) provide a legal framework to curb nation states from becoming nuclear actors. Unfortunately, there is little international leverage to force compliance.

⁹ DoD, Proliferation: Threat and Response, 25.

¹⁰ Graham H. Turbiville, Jr., "Weapons Proliferation and Organized Crime, Russian Military Dimensions," Airpower Journal Special Edition 1996, 18.

As shown in the case of Iraq, a state can develop clandestine weapons projects while still outwardly appearing to satisfy the IAEA requirements. Secondly, the NPT/IAEA safeguard system is ineffective, and not concerned with the intentions of its member states. Members maintain the presumption of innocence and legitimacy as long as the IAEA has not determined otherwise.¹² It does not prevent any state from acquiring WMD nor from proceeding with research. Next, compliance is voluntary and can be rescinded at any time. Therefore, a determined state can pursue a WMD weapons program, while enjoying the benefits of the NPT/IAEA, then when convenient, legally withdraw. Once states vying for regional power gain access to WMD, and possess the political will to use them, then our national security strategy will be at risk.

Theater Commander's Operational Design for Preemptive Strikes.

A serious gap exists between the United States counterproliferation policy and the systems currently available to the theater commander to implement the policy and adequately protect the forces under his command. Aware that the systems required to counter and protect his theater of operations are in many cases unavailable, how then does he create a viable strategy to satisfy the president's national security strategy on counterproliferation while ensuring his force protection obligations?

The theater commander in line with the Defense Counterproliferation Initiative has only four principle options to mix and match. He can allow the continued proliferation of WMD, compel actors to abandon or not enter the arena, adopt a purely defensive posture, or attack successful proliferators. An effective solution is the

¹¹ Institute for National Strategic Studies, The Impact of NBC Proliferation on U.S. Armed Forces, 11.

preemptive strike to actively counter a WMD threat. In support of this option, the Naval War College Joint Military Operations Department's four theme questions will be used to frame the operational commanders' requirements.

What operational level goals or conditions must be achieved in order to meet the nation's strategic objectives?

The theater commander's analysis would normally determine the possible strategies he may have to counter by enemies who possess WMD assets. He can start with policy from the National Security Strategy through the DoD Nonproliferation Defense Initiative. The national desired end state is clear. Hold the current line of nation states that possess NBC systems, internationally outlaw the most grievous forms (chemical and biological) and convince through incentives or coercion, states (like South Africa and allegedly North Korea) to voluntarily terminate their WMD programs. However, this strategy is too defensive. With a more offensive strategy, the theater commander can create the condition where it is apparent to all that the cost of entering the WMD arena is too high. He must convince all that he can strike with impunity and exert leverage throughout his theater of operations. This strategy moves beyond deterrence, benign acquiesce and defensive measures. This is an offensive consideration seeking to contain current proliferents, discourage emerging ones and if necessary punish those that are too unpredictable or irrational. In support of this goal, the NCA assists the operational commander by better defining the threat from WMD, and identifying which states or transnational groups will not be allowed to gain possession of WMD. Secondly, the NCA should openly state that theater commanders could plan nuclear options not as a

¹² Avner Cohen, "The Lessons of Osirak and the American Counterproliferation Debate" International Perspectives on Counterproliferation, Division of International Studies Woodrow Wilson International

last resort or retaliatory measure but as a preemptive tool to counter WMD threats. Next, any country that does not allow full and open access to international inspectors can be considered a threat. Finally, all states considered threats would be prohibited (through boycott, sanction or quarantine) from importing technologies that support WMD and advanced delivery systems.

This new strategic guidance moves Counterforce operations to the forefront of our Counterproliferation Initiative. Now the theater commander's goal is to actively keep the WMD players to a manageable, short, exclusive and most importantly, a friendly club.

Once authorized to consider active measures, the theater commander must insure that the political and military consequences of a preemptive strike support our stated national objectives. Operational success will be measured not only on tactical success but the conditions that will exist after the mission is complete. The theater commander must define and clearly articulate what constitutes mission success. The risks inherent in this type of operation will place considerable demands on the theater planning staff and his designated Strike Force. This question will of course also be considered at the national level, but the theater commander should have a voice in those discussions and his council should carry considerable weight. After all, it is his command that will bear the brunt of attention as well as post strike protection considerations.

A preemptive strike signifies a very sharp turn in our stated policy. Legal arguments countering sovereignty claims, as well as quieting domestic and allied reactions need to be prepared. The very nature of the operation as a unilateral strike or a multi-lateral international operation needs to be considered and analyzed. If time is available and the risk assessment permits, the theater commander can initiate initiatives

to frame the political, operational and even psychological environment so that it supports the legitimacy of the action, supports his operational scheme, and the post strike environment within his theater of operations.

What sequence of actions must be planned and executed to reach those operational goals?

At the theater level, the theater commander must advance a continual planning cycle for possible preemptive strike contingencies. Battle books outlining various strike options and deployment packages can be created separately from the standing operations plans. These “play books” would outline all available information on known or suspected target sites, with completed detailed mission analysis and subordinate orders available for modification or execution, once the NCA initiating directive is received. Prepared and approved deliberate planning templates with workable standard operating procedures (SOP) reduce planning time during crisis situations. Internal staff planning exercises can refine any staff coordination and mission planning shortcomings. Specific plans can, with sufficient cover for status and action, incorporate strategic and special operations forces (SOF) into regional war games and joint exercises. There are numerous planning cycles a theater commander can initiate to better prepare his command for mission execution.

From within his theater of operations, the theater commander would have to consider expanding the planning to include intergovernmental agencies, alliance organizations, and regional embassies. Integrating allies may increase the risk of compromise but it also strengthens the operation as a sanctioned international or coalition event. It broadens the offensive aspects of a preemptive strike by signaling a united resolve to actively engage proliferents as well as validating United States security agreements. These sensitive discussions also must address in advance targeting

considerations into areas where allies have their own zones of interest. For example, targeting WMD threats on the North African coast would require diplomatic and military discussions with France. Also, the impact of a preemptive strike on countries outside the theater of operations must be considered. If, for instance the theater commander targets a Moslem fundamentalist group, the impact will be heard throughout the Moslem world and plans should be made beforehand to either counter or capitalize on the attack.¹³

The NCA can assist the theater commander's options by approving the pre-conditions, timing, and decision points that will guide theater planning, war gaming and eventually preemptive attacks.

This advance planning for specific WMD targets, not only simplifies decision making during crisis but it also pre-conditions theater forces, allies and proliferents to the viability of this action. This is no longer a consideration or a planning exercise. It becomes a clearly defined course of action that will be taken if certain conditions are met.

Directly supporting the operations planning and political support mechanisms is the intelligence effort. Given the priority and criticality of mission success, the entire intelligence apparatus of the United States needs to be brought to bear on this requirement. Intelligence indicators abound, with requirements for human and technical means to verify and confirm the legitimacy of targets throughout the research, development, production, storage and deployment cycle. Given the anticipated political and international condemnations that would normally be expected to follow such an

¹³ Colonel John Moroney USA, Special Forces Retired highlighted this possibility, in discussions with me on this thesis.

operation, it is crucial that the intelligence effort is focused, and the data are indisputably accurate.¹⁴

How should the joint force's assets be applied to accomplish the desired sequence of actions?

Strike options for preemptive attacks can take many forms. They are as variable as the targets they are arrayed against. Possible strike packages can be divided into overt or covert actions. Weapons mixes include nuclear, conventional or combined strikes. Forces allocated to a Joint Task Force (JTF) would most likely be heavy in strategic and special operations forces (SOF). Conventional forces would function in a supporting role. Expanded targeting options should also be considered in advance. There is the quick surgical air attack exemplified by the Israeli raid on the Osirak nuclear reactor near Baghdad on June 7, 1981.¹⁵ There are also high-end options, nuclear and conventional mix or low-end covert actions, such as SOF working with surrogates, to sabotage, damage or delay critical nodes throughout the development and deployment cycle. The April 6, 1979, explosion at a French industrial plant near Toulon that badly damaged a completed reactor core ready for shipment to Iraq was attributed to Israeli agents.¹⁶ Actions such as these send an implied signal, which reinforces the preemptive attack initiative while at the same time, delaying WMD systems from becoming operational.

An expanded target set could include destroying the WMD site as well as targeting the proliferent's leadership. This would have much broader implications for post settlement hostilities but depending on the target state, it may lessen the risk of

¹⁴ It is important to have verifiable and RELEASIBLE information. Often, information cannot be released because it compromises the source or the methods used, putting more at risk than just having to deal with the post-strike condemnations.

¹⁵ Avner Cohen, 74.

¹⁶ Ibid., 81.

retaliation. There is the possibility that with some extremist organizations, “decapitating” the leadership may actually cement their martyrdom or advance an even more irrational actor’s position in the organization. This highlights why each target and target state requires a customized plan, each with their own options, decision points and post strike considerations.

There are a number of important considerations in targeting WMD sites regardless of the size of the Strike Force. Environmental and health concerns associated with the unintended release of chemical precursors or biological pathogens must be considered. The unresolved effects of possible nerve, chemical or biological agents during Operation Desert Storm continue to elude our science and medical experts. The medical community is divided on the question of whether exposure to low levels of nerve or chemical agents can lead to long term health problems.¹⁷ Nevertheless, the fact that the conventional demolition of the Iraqi ammunition dump at Kamisiyah may have some influence on the Gulf War Syndrome must be considered when targeting a chemical or biological target. In these cases, the nuclear option offers a better chance of containing the release of deadly chemicals or microorganisms, especially given the technological advantages of our nuclear devices. Minimal radioactive releases from a precision nuclear strike are infinitely more palatable to wide spread contamination of deadly chemical or biological agents.

The decision on the timing requires considerable attention. Intelligence shortfalls are always well publicized but they have been successful in a number of instances related to the WMD threats. For example, “the United States intelligence community determined

¹⁷ Philip Shenon, “CIA is unfairly blamed in Chemical blast, Panel is told.” The New York Times National 17 April, 1997, A22.

that Iraq had initiated sizable nuclear weapon projects... but senior United States officials did not respond forcefully to their message until the Iraqi program employed more than 20,000 people.”¹⁸ Militarily, it is preferable to target a site or device before it becomes operational, stored or deployed. The solution set for targeting changes at each evolution in the development cycle. Overall, the attendant risk increases, as does the requirement for political and moral will to decide on this proposed course of action.

What are the likely derivative costs and risks?

Together with the timing decisions, the risks associated with a preemptive strike are high. The theater commander must consider the cost implications during the post strike phase. The post strike phase is defined here starting from the completion of the attack until the reactions from friendly and enemy states have been analyzed. There is of course, a risk of retaliation from the target country. If this risk is viable, this could support an expanded strike at the proliferants leadership as well as the WMD target set.

In balancing or justifying the risks, the NCA must clearly state for the theater commander the conditions and decision points that confirms the severity and immediacy of the threat. If we are confronted with a determined and willing proliferent and diplomatic incentives and coercion have failed, the risk to do nothing is too high. Logically then, the principal decision point has already been met. What is required is to confirm the threat and demonstrate the political will to act. Once you determine the existence, confirm the location and hostile intent, delaying targeting will only increase the overall risk to the theater commander’s forces or countries under his protection.

¹⁸ CRS Report for Congress, 4.

Besides the operational risk of a preemptive option, the hostility from the international and domestic political systems cannot be discounted. This consideration applies as in any military operation other than war (MOOTW) but much more so when the use of nuclear weapons is contemplated. Our detractors would make a case that the United States as a global world leader with challenges across the full spectrum of international affairs cannot act unilaterally. They would question the legal basis for our authority to violate territorial sovereignty. Some have also prophesied that such action would lead to the legalization of the use of nuclear weapons, a restart of the Cold War, or even nuclear anarchy.¹⁹ The reality is we don't know what the long-term effect on our allies and enemies a preemptive attack would have. There will always be those from the international political and domestic arena who will never be swayed to accept this course of action, no matter how overwhelming the evidence.

Conclusion.

In the end, it does come down to how much risk the nation is willing to accept when the cost of inaction is so great. We can again take as a historical prospective the Israeli raid on Osirak. This attack occurred at the height of Cold War tensions, by a nation surrounded by allies friendly to Iraq. Iraq at the time was by international standards in full compliance with the NPT/IAEA. Yet, although the Israeli Prime Minister's "intelligence and nuclear chief were in agreement that the target posed no immediate threat,"²⁰ he nonetheless was convinced of the necessity to attack. Prime

¹⁹ Oleg A. Grinevsky, "Counterproliferation: Panacea or Threat?" International Perspectives on Counterproliferation, Division of International Studies Woodrow Wilson International Center for Scholars, January 1995, 38.

²⁰ Cohen, Chapter 7, 86.

Minister Begin demonstrated exceptional courage; leadership, vision and more importantly, concern for the consequences of inaction.

This action is a credible template for the United States strategic and operational leadership. Today as in 1981, the international safeguards are ineffective to control a determined proliferent. A preemptive action sends a strong signal to other would be proliferents that the cost to enter the WMD arena is going to be high. The gravity of risk of inaction and allowing a proliferent to expand and advance their programs until the target set is too multi-faceted to engage, strengthens a go early preemptive response.

Our theater commanders command forces capable of conducting preemptive strikes. The preemptive attack option is a high-risk operation with many unknown consequences. It most probably would entail a nuclear weapon. The requirement for the theater commander to formulate a military strategy that supports the political goals and defends our interests has not changed. The threat however, has changed and with it the requirement to modify our military and operational strategy. The time is now for our political leadership to redefine our national interests and how they correctly pertain to the need for a preemptive strike. The expansion of political will as an extension of our national values and interests will be one of the driving points that has to exist to allow this to be a viable option.

If the United States approaches proliferation and theater commanders plan to react to WMD challenges with an active consistent policy of preemptive strikes, the security of the United States is enhanced and the world becomes more stable and secure. Perhaps in the future, systems will be able to provide the theater commander and the continental United States with a measure of security that will negate this option. Until those systems

are deployed as fully operational systems, a preemptive strike option may be the only recourse to secure a less dangerous world.

Bibliography

- CRS Report for Congress. Nuclear, Biological, and Chemical Weapon Proliferation: Potential Military Countermeasures. Washington: Congressional Research Service-The Library of Congress, June 28, 1994.
- Cohen, Avner. The Lessons of Osirak and the American Counterproliferation Debate. International Perspectives on Counterproliferation, Working Paper No. 99. Chapter 7, Washington: Woodrow Wilson International Center for Scholars, January 1995.
- Danzig, Richard. Biological Warfare: A Nation at Risk—A time to Act, Strategic Forum 58, Institute for National Strategic Studies, National Defense University, Washington: January 1996.
- Domenici, Pete V. "Countering Weapons of Mass Destruction." The Washington Quarterly, Winter 1995, 145-152.
- Grinevsky, Oleg A. Counterproliferation: Panacea or Threat? International Perspectives on Counterproliferation, Working Paper No. 99. Chapter 4, Washington: Woodrow Wilson International Center for Scholars, January 1995.
- Institute for National Strategic Studies, National Defense University: The Impact of Nuclear, Biological, and Chemical Proliferation on U.S. Armed Forces. Washington: September 1996.
- Joseph, Robert G. "Weapons of Mass Destruction: Raising the Ante." Lecture. U.S. Central Command Southwest Asia Symposium 1996: 14 May, 1996.
- Joseph, Robert G. and John F. Reichart. Deterrence and Defense in a Nuclear, Biological, and Chemical Environment. Center for Counterproliferation Research, Institute for National Strategic Studies, National Defense University. Washington: 1996.
- Kay, David A. "Denial and Deception Practices of WMD Proliferators: Iraq and Beyond." The Washington Quarterly, Winter 1995, 85-105.
- Pilat, Joesph F. and Walter L. Kirchner, "The Technological Promise of Counterproliferation," The Washington Quarterly, Winter 1995, 153-166.
- Roberts, Guy B. Five Minutes Past Midnight: The Clear and Present Danger of Nuclear Weapons Grade Fissile Materials, INSS Occasional Paper 8, Proliferation Series. U.S. Air Force Academy, Colorado: Institute for National Security Studies, February 1996.
- Roberts, Guy B. "Nuclear Weapons-Grade Fissile Materials, The Most Serious Threat to US National Security Today?" Airpower Journal, Special Edition, 1996, 5-16.

Schneider, Barry R. "Strategies for Coping with Enemy Weapons of Mass Destruction" Airpower Journal, Special Edition, 1996, 36-47.

Schneider, Barry R. "Nuclear Proliferation and Counter-Proliferation: Policy Issues and Debates," Mershon International Studies Review 38, 1994, 209-234.

Shenon, Philip. "C.I.A. Is Unfairly Blamed in Chemical Blast, Panel Is Told," The New York Times National, 17 April 1996, p. A22.

The White House. A National Security Strategy of Engagement and Enlargement. Washington: February 1996.

Turbiville Jr., Graham H. "Weapons Proliferation and Organized Crime, Russian Military Dimensions." Airpower Journal Special Edition 1996, 17-24.

U.S. Dept. of Defense. Proliferation: Threat and Response. Washington: April 1996.